

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/046247 A1

(51) International Patent Classification⁷: **H04N 7/66,**
H03M 13/15

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(21) International Application Number:
PCT/IB2004/052205

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(22) International Filing Date: 26 October 2004 (26.10.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0325843.1 5 November 2003 (05.11.2003) GB

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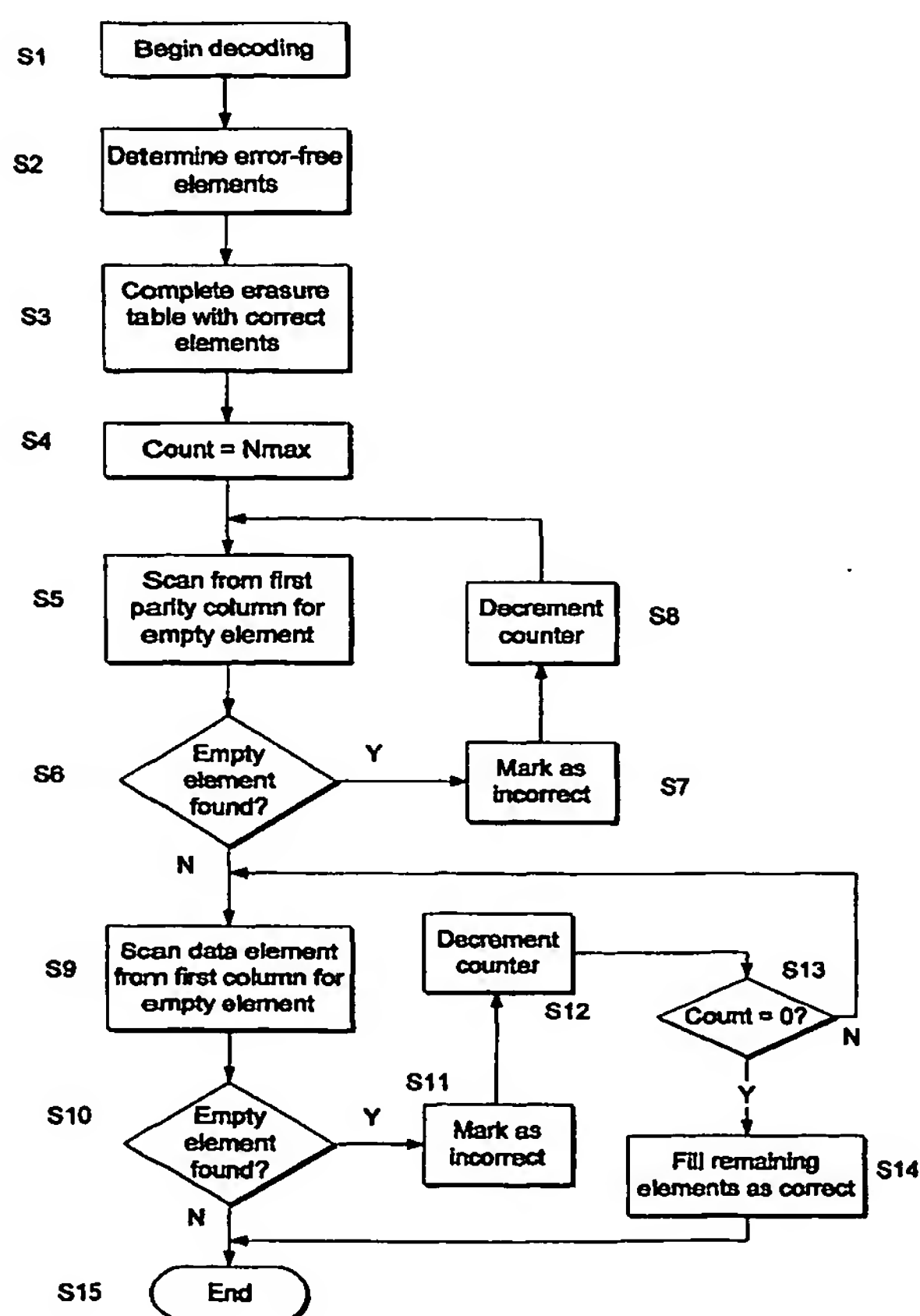
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(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: FORWARD ERROR CORRECTION DECODERS



(57) Abstract: Elements of a coding table which are error-free are found at S2. At S3, corresponding elements in an erasure information table are completed, indicating that the elements in the coding array are correct. A counter is initialised at Nmax, which is the maximum number of errors that can be corrected, at S4. At S5, the row of the erasure information table is scanned beginning from the first parity column for empty elements. Each empty parity data element of the erasure information table row is marked as incorrect at S7. For each such element, the counter is decremented at S8. At S9, the elements of the erasure information table are scanned from the first column of the application data and zero padding section for empty elements. At step S11, an empty element is marked as incorrect. At step S12, the counter is then decremented. It is determined at step S13 whether or not the counter is equal to zero. When the counter becomes equal to zero, operation proceeds to step S14 where the decoder operates to fill remaining empty elements in the erasure information row as correct. Thus, whilst the count of incorrect elements for the row has not exceeded a maximum and whilst empty elements remain, empty elements of the erasure table row are marked as incorrect beginning with parity data elements and then continuing from the application data end.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.